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PATENT ABSTRACTS OF JAPAN

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(71)Applicant : MATSUSHITA ELECTRIC IND CO LTD

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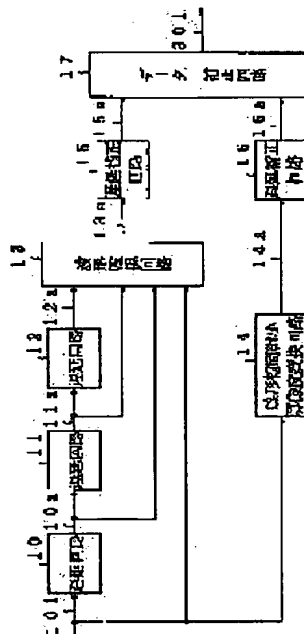
(72)Inventor : YAMAUCHI TOSHIYUKI
TACHIKAWA KOJI
YAMAZAKI KOICHI

(54) IMAGE PROCESSOR

(57)Abstract:

PROBLEM TO BE SOLVED: To obtain a clear image which is approximate to its original by preventing the deterioration of sharpness or the uneven luminance that is caused when the resolution of a digital image is converted.

SOLUTION: A linear interpolation reduction resolution converter 14 inputs a digital original image 101 to convert it into a digital reduced or enlarged image by the linear interpolation system and in response to a designated conversion rate and outputs a linear interpolation signal 14a. A waveform monitoring circuit 13 always monitors the levels of the image 101, a 1-step delay signal 10a, a 2-step delay signal 11a and a 3-step delay signal 12a respectively and detects the pixels of both top and bottom parts of each level. A data correction circuit 17 replaces a delay-corrected linear interpolation signal 16a with a delay-corrected correction pixel signal 15a and generates a reduced image 301.



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(54) 【発明の名称】 画像処理装置

(57) 【要約】

【課題】 デジタル画像を解像度変換する際に、画像の先鋭度の劣化や輝度むらの発生を防ぎ、より原画に近い鮮明な画像を得ること。

【解決手段】 線形補間縮小解像度変換回路14はデジタル原画像101を入力し、指定された変換倍率に応じて線形補間方式を用いてデジタル縮小又は拡大画像に変換し、線形補間信号14aを出力する。波形監視回路13はデジタル原画像101、1段遅延信号10a、2段遅延信号11a、3段遅延信号12の各レベルを常時監視し、そのレベルの山頂部分と谷底部分の画素を検出する。データ補正回路17は遅延補正された線形補間信号16aを、遅延補正された補正画素信号15aで置き換え、縮小画像301を生成する。

